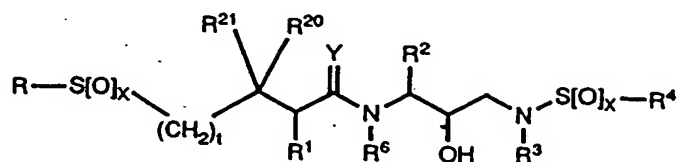


WHAT IS CLAIMED IS:

1. A compound represented by the formula:



or a pharmaceutically acceptable salt, prodrug or ester thereof wherein:

- 10 R represents hydrogen, alkyl, alkenyl, alkynyl, hydroxyalkyl, alkoxyalkyl, cycloalkyl, cycloalkylalkyl, heterocycloalkyl, heteroaryl, heterocycloalkylalkyl, aryl, aralkyl, heteroaralkyl, aminocarbonylalkyl, aminoalkylcarbonylalkyl, aminoalkyl, alkylcarbonylalkyl, 15 aryloxyalkylcarbonylalkyl, aralkoxycarbonylalkyl radicals and mono- and disubstituted aminocarbonylalkyl, aminoalkylcarbonylalkyl and aminoalkyl radicals wherein said substituents are selected from alkyl, aryl, aralkyl, cycloalkyl, cycloalkylalkyl, heteroaryl, heteroaralkyl, 20 heterocycloalkyl, and heterocycloalkylalkyl radicals, or in the case of a disubstituted radical, said substituents along with the nitrogen atom to which they are attached, form a heterocycloalkyl or a heteroaryl radical;

- 25 each x independently represents 0, 1 or 2;

t represents either 0 or 1;

- 30 R¹, R²⁰ and R²¹ independently represent hydrogen, -CH₂SO₂NH₂, -CH₂CO₂CH₃, -CO₂CH₃, -CONH₂, -CH₂C(O)NHCH₃, -C(CH₃)₂(SH), -C(CH₃)₂(SCH₃), -C(CH₃)₂(S(O)CH₃), -C(CH₃)₂(S(O)₂CH₃), alkyl, haloalkyl, alkenyl, alkynyl and cycloalkyl radicals, and amino acid side chains selected

from asparagine, S-methyl cysteine and the sulfoxide (SO) and sulfone (SO₂) derivatives thereof, isoleucine, allo-isoleucine, alanine, leucine, tert-leucine, phenylalanine, ornithine, histidine, norleucine,
5 glutamine, threonine, glycine, allo-threonine, serine, O-alkyl serine, aspartic acid, beta-cyano alanine and valine side chains;

10 R² represents alkyl, aryl, cycloalkyl, cycloalkylalkyl and aralkyl radicals, which radicals are optionally substituted with a group selected from -NO₂, -C≡N, CF₃, -OR⁹, -SR⁹, and halogen and alkyl radicals, wherein R⁹ represents hydrogen and alkyl radicals;

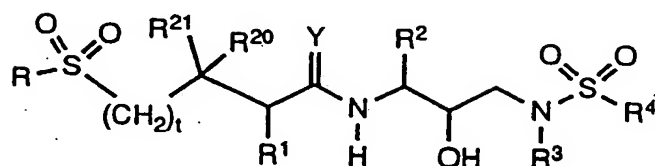
15 R³ represents hydrogen, alkyl, haloalkyl, alkenyl, alkynyl, hydroxyalkyl, alkoxyalkyl, cycloalkyl, cycloalkylalkyl, heterocycloalkyl, heteroaryl, heterocycloalkylalkyl, aryl, aralkyl, heteroaralkyl, aminoalkyl and mono- and disubstituted aminoalkyl
20 radicals, wherein said substituents are selected from alkyl, aryl, aralkyl, cycloalkyl, cycloalkylalkyl, heteroaryl, heteroaralkyl, heterocycloalkyl, and heterocycloalkylalkyl radicals, or in the case of a disubstituted aminoalkyl radical, said substituents along
25 with the nitrogen atom to which they are attached, form a heterocycloalkyl or a heteroaryl radical;

Y represents O, S and NR¹⁵ wherein R¹⁵ represents hydrogen and radicals as defined for R³;

30 R⁴ represents radicals as defined by R³ except for hydrogen; and

R⁶ represents hydrogen and alkyl radicals.
35

2. Compound represented by the formula:



5 or a pharmaceutically acceptable salt, prodrug or ester thereof, wherein;

R represents alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkylalkyl, heterocycloalkyl, heterocycloalkylalkyl, aryl, heteroaryl, aralkyl, heteroalkyl, aminocarbonylalkyl, aminoalkylcarbonylalkyl, hydroxyalkyl, heteroaralkyl, alkylcarbonylalkyl, aryloxyalkylcarbonylalkyl and aralkoxycarbonylalkyl radicals;

15 R^1 , R^{20} and R^{21} independently represent hydrogen, $-CH_2SO_2NH_2$, $-CH_2CO_2CH_3$, $-CO_2CH_3$, $-CONH_2$, $-CH_2C(O)NHCH_3$, $-C(CH_3)_2(SCH_3)$, $-C(CH_3)_2(S[O]CH_3)$, $-C(CH_3)_2(S[O]_2CH_3)$, alkyl, haloalkyl, alkenyl, alkynyl and cycloalkyl radicals, and amino acid side chains selected from asparagine, S-methyl cysteine and the sulfoxide (SO) and sulfone (SO_2) derivatives thereof, isoleucine, allo-isoleucine, alanine, leucine, tert-leucine, phenylalanine, ornithine, histidine, norleucine, glutamine, threonine, glycine, allo-threonine, serine, O-alkyl serine, aspartic acid, beta-cyano alanine and valine side chains;

30 R^2 represents alkyl, aryl, cycloalkyl, cycloalkylalkyl, and aralkyl radicals, which radicals are optionally substituted with a group selected from halogen and alkyl radicals, NO_2 , $-C\equiv N$, CF_3 , $-OR^9$ and $-SR^9$ wherein R^9 represents hydrogen and alkyl radicals, and halogen radicals;

35

R³ represents hydrogen, alkyl, haloalkyl, alkenyl, alkynyl, hydroxyalkyl, alkoxyalkyl, cycloalkyl, cycloalkylalkyl, heterocycloalkyl, heteroaryl, heterocycloalkylalkyl, aryl, aralkyl, heteroaralkyl, aminoalkyl and mono- and disubstituted aminoalkyl radicals, wherein said substituents are selected from alkyl, aryl, aralkyl, cycloalkyl, cycloalkylalkyl, heteroaryl, heteroaralkyl, heterocycloalkyl, and heterocycloalkylalkyl radicals, or in the case of a disubstituted aminoalkyl radical, said substituents along with the nitrogen atom to which they are attached, form a heterocycloalkyl or a heteroaryl radical;

R⁴ represents radicals as defined by R³ except for hydrogen;

t represents 0 or 1; and

Y represents O, S, and NR¹⁵ wherein R¹⁵ represents hydrogen and radicals as defined for R³.

3. Compound of Claim 2 wherein R represents alkyl, aryl and aralkyl radicals.

4. Compound of Claim 2 wherein R represents methyl and phenethyl radicals.

5. Compound of Claim 2 wherein R represents methyl.

6. Compound of Claim 2 wherein R represents phenethyl.

7. Compound of Claim 2 wherein R¹ represents hydrogen, alkyl, alkenyl and alkynyl radicals.

8. Compound of Claim 2 wherein R¹ represents methyl, ethyl, propargyl, t-butyl, isopropyl and sec-butyl radicals.
- 5 9. Compound of Claim 2 wherein R¹ represents methyl, ethyl and t-butyl radicals.
- 10 10. Compound of Claim 2 wherein R¹ represents a methyl radical when t is 0.
11. Compound of Claim 2 wherein R¹ represents an ethyl radical when t is 0.
- 15 12. Compound of Claim 2 wherein R¹ represents alkyl radicals having from 1 to about 4 carbon atoms.
13. Compound of Claim 2 wherein R and R¹ both represent a methyl radical.
- 20 14. Compound of Claim 2 wherein R represents a methyl radical and R¹ represents an ethyl radical.
15. Compound of Claim 2 wherein R represents a methyl radical, R¹ represents a methyl radical and t is 0.
- 25 16. Compound of Claim 2 wherein t is 0.
17. Compound of Claim 2 wherein t is 1.
- 30 18. Compound of Claim 2 wherein R² represents alkyl, cycloalkylalkyl and aralkyl radicals, which radicals are optionally substituted with halogen radicals and radicals represented by the formula -OR⁹ and -SR⁹ wherein R⁹ represents alkyl radicals.
- 35 19. Compound of Claim 2 wherein R² represents alkyl, cycloalkylalkyl and aralkyl radicals..

20. Compound of Claim 2 wherein R² represents aralkyl radicals.

5 21. Compound of Claim 2 wherein R² represents CH₃SCH₂CH₂-, iso-butyl, n-butyl, benzyl, 4-fluorobenzyl, 2-naphthylmethyl and cyclohexylmethyl radicals.

22. Compound of Claim 2 wherein R² represents an n-butyl and iso-butyl radicals.

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23. Compound of Claim 2 wherein R² represents benzyl, 4-fluorobenzyl and 2-naphthylmethyl radicals.

15 24. Compound of Claim 2 wherein R² represents a cyclohexylmethyl radical.

25. Compound of Claim 2 wherein R³ and R⁴ independently represent alkyl, alkenyl, hydroxyalkyl, alkoxyalkyl, haloalkyl, cycloalkyl, cycloalkylalkyl, 20 heterocycloalkyl, heteroaryl, heterocycloalkylalkyl, aryl, aralkyl and heteroaralkyl radicals.

26. Compound of Claim 25 wherein R³ represents an alkyl radical and R⁴ represents an aryl radical.

25

27. Compound of Claim 25 wherein R³ and R⁴ independently represent alkyl and aryl radicals.

28. Compound of Claim 25 wherein R³ and R⁴ 30 independently represent alkyl, cycloalkyl, cycloalkylalkyl, aralkyl and aryl radicals.

29. Compound of Claim 25 wherein R³ and R⁴ 35 independently represent alkyl, cycloalkyl and cycloalkylalkyl radicals.

30. Compound of Claim 25 wherein R³ and R⁴ independently represent alkyl, heterocycloalkyl and heterocycloalkylalkyl radicals.

5 31. Compound of Claim 25 wherein R³ and R⁴ independently represent alkyl, aryl and aralkyl radicals.

32. Compound of Claim 25 wherein R⁴ represents phenyl, p-fluorophenyl, p-nitrophenyl, p-methoxyphenyl,
10 p-chlorophenyl and p-aminophenyl radicals.

33. Compound of Claim 2 wherein R³ represents alkyl radicals having from about 2 to about 5 carbon atoms.
15

34. Compound of Claim 2 wherein R³ represents n-pentyl, n-hexyl, n-propyl, i-butyl, neo-pentyl, i-amyl, and n-butyl radicals.

20 35. Compound of Claim 2 wherein R³ represents alkyl radicals having from about 2 to about 5 carbon atoms, and cycloalkyl and cycloalkylalkyl radicals having from about 6 to about 10 carbon atoms; and R⁴ represents aryl and heteroaryl radicals which may be substituted
25 with substituents selected from chloro, fluoro, nitro, methoxy and amino substituents.

36. Compound of Claim 2 wherein R³ represents benzyl, para-fluorobenzyl, para-methoxybenzyl, para-methylbenzyl, and 2-naphthylmethyl radicals and R⁴
30 represents phenyl radicals and substituted phenyl radicals, wherein substituents of the substituted phenyl radical are selected from chloro, fluoro, nitro, methoxy and amino substituents.

35 37. Compound of Claim 2 wherein R³ is cyclohexylmethyl and R⁴ is phenyl.

38. Compound of Claim 2 wherein R³ is i-amyl and R⁴ is phenyl.

39. Compound of Claim 2 wherein R³ is i-butyl and R⁴ is phenyl.

40. Compound of Claim 2 wherein R³ is n-butyl and R⁴ is phenyl.

41. Compound of Claim 2 wherein R³ is neopentyl and R⁴ is phenyl.

42. Compound of Claim 2 wherein R⁴ represents aryl radicals.

43. Compound of Claim 2 wherein R⁴ represents substituted aryl and heteroaryl radicals wherein substituents are selected from halo, nitro, alkoxy, and amino radicals.

44. Compound of Claim 2 wherein R³ and R⁴ independently represent alkyl, cycloalkyl, cycloalkylalkyl, aryl and aralkyl radicals.

45. Compound of Claim 2 wherein R³ represents heteroaralkyl radicals and R⁴ is an aryl radical.

46. Compound of Claim 2 wherein R³ is a p-fluorobenzyl radical and R⁴ is an aryl radical.

47. Compound of Claim 2 wherein R³ is a 4-pyridylmethyl radical or its N-oxide and R⁴ is an aryl radical.

48. Compound of Claim 2 wherein R⁴ represents methyl and cyclohexyl radicals and R³ represents an alkyl radical.

49. Compound of Claim 2 wherein R^3 and R^4 independently represent aryl radicals optionally substituted with substituents selected from amino, alkoxy, halo, and nitro substituents.
50. Compound of Claim 2 wherein R^{20} and R^{21} are both hydrogen and R^1 represents an alkyl radical having from 1 to about 4 carbon atoms.
51. Compound of Claim 2 wherein R^{20} and R^{21} are both hydrogen and R^1 represents, $-CH_2SO_2NH_2$, CO_2NH_2 , CO_2CH_3 , alkyl and cycloalkyl radicals and amino acid side chains selected from asparagine, S-methyl cysteine and the sulfone and sulfoxide derivatives thereof, histidine, norleucine, glutamine, glycine, allo-isoleucine, alanine, threonine, isoleucine, leucine, tert-leucine, phenylalanine, ornithine, allo-threonine, serine, O-methyl serine, aspartic acid, beta-cyano alanine and valine side chains.
52. Compound of Claim 2 wherein t is O, R^1 represents an alkyl radical and R represents an alkyl, cycloalkyl, cycloalkylalkyl or an aryl radical.
53. Compound of Claim 2 wherein R represents a heteroaryl radical.
54. Compound of Claim 2 wherein R represents an alkyl or aryl radical.
55. Compound of Claim 2 wherein t is O, R^1 represents a methyl or ethyl radical and R represents a methyl or phenethyl radical.
56. Compound of Claim 2 wherein R represents an aralkylcarbonylalkyl, aryloxy carbonylalkyl, alkanoylalkyl, aminocarbonylalkyl, or a mono- or dialkylaminocarbonylalkyl radical.

57. Compound of Claim 2 wherein R represents an aryloxy carbonylalkyl or alkanoylalkyl radical.

5 58. Compound of Claim 2 wherein R represents an aminocarbonylalkyl radical, a monosubstituted aminoalkanoylalkyl radical or disubstituted aminoalkanoylalkyl radical.

10 59. Compound of Claim 2 where R represents an aralkyl carbonylalkyl radical.

60. Compound of Claim 2 where t is 1 and R¹ is a methyl radical.

15 61. Compound of Claim 60 where R represents an alkyl, cycloalkyl, cycloalkylalkyl, aryl or aralkyl radical.

20 62. Compound of Claim 60 where R represents a methyl, cyclohexyl, cyclohexylmethyl, phenyl, benzyl or phenethyl radical.

25 63. Compound of Claim 2 wherein t is 1, R²⁰ and R²¹ are both hydrogen and R¹ is methyl or ethyl.

64. Compound of Claim 60 wherein R represents an aminocarbonylalkyl or a mono- or dialkylaminocarbonylalkyl radical.

30 65. Compound of Claim 60 where R represents an N,N-dimethylaminocarbonylalkyl radical.

35 66. A pharmaceutical composition comprising a compound of Claim 1 and a pharmaceutically acceptable carrier.

67. A pharmaceutical composition comprising a compound of Claim 2 and a pharmaceutically acceptable carrier.

5 68. Method of inhibiting a retroviral protease comprising administering a protease inhibiting amount of a composition of Claim 66.

10 69. Method of Claim 68 wherein the retroviral protease is HIV protease.

15 70. Method of treating a retroviral infection comprising administering an effective amount of a composition of Claim 66.

 71. Method of Claim 70 wherein the retroviral infection is an HIV infection.

20 72. Method for treating AIDS comprising administering an effective amount of a composition of Claim 66.

25 73. Method of inhibiting a retroviral protease comprising administering a protease inhibiting amount of a composition of Claim 67.

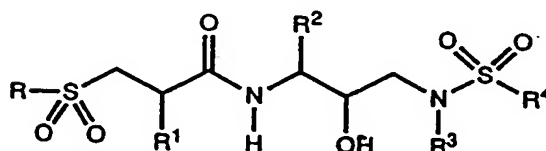
 74. Method of Claim 73 wherein the retroviral protease is HIV protease.

30 75. Method of treating a retroviral infection comprising administering an effective amount of a composition of Claim 67.

35 76. Method of Claim 75 wherein the retroviral infection is an HIV infection.

77. Method for treating AIDS comprising administering an effective amount of a composition of Claim 67.

5 78. Compound represented by the formula:



10 or a pharmaceutically acceptable salt, prodrug or ester thereof, preferably wherein the stereochemistry about the hydroxy group is designated as (R);

R represents alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkylalkyl, heterocycloalkyl, heterocycloalkylalkyl, 15 aryl, heteroaryl, aralkyl, heteroaralkyl, aminocarbonylalkyl, aminoalkylcarbonylalkyl, hydroxyalkyl, alkoxyalkyl, alkylcarbonylalkyl, aryloxyalkylcarbonylalkyl and aralkoxycarbonylalkyl radicals;

20 R¹ represents hydrogen, -CH₂SO₂NH₂, -CH₂CO₂CH₃, -CO₂CH₃, -CONH₂, -CH₂C(O)NHCH₃, -C(CH₃)₂(SCH₃), -C(CH₃)₂(S[O]CH₃), -C(CH₃)₂(SH), -C(CH₃)₂(S[O]₂CH₃), alkyl, haloalkyl, alkenyl, alkynyl and cycloalkyl radicals, and amino acid 25 side chains selected from asparagine, S-methyl cysteine and the sulfoxide (SO) and sulfone (SO₂) derivatives thereof, isoleucine, allo-isoleucine, alanine, leucine, tert-leucine, phenylalanine, ornithine, histidine, norleucine, glutamine, threonine, glycine, allo-threonine, 30 serine, O-methyl serine, aspartic acid, beta-cyano alanine and valine side chains;

R² represents alkyl, aryl, cycloalkyl, cycloalkylalkyl, and aralkyl radicals, which radicals are optionally 35 substituted with a group selected from halogen and alkyl

radicals, NO_2 , $-\text{C}\equiv\text{N}$, CF_3 , OR^9 and SR^9 wherein R^9 represents hydrogen and alkyl radicals;

R^3 represents hydrogen, alkyl, haloalkyl, alkenyl, alkynyl, hydroxyalkyl, alkoxyalkyl, cycloalkyl, cycloalkylalkyl, heterocycloalkyl, heteroaryl, heterocycloalkylalkyl, aryl, aralkyl, heteroaralkyl, aminoalkyl and mono- and disubstituted aminoalkyl radicals, wherein said substituents are selected from alkyl, aryl, aralkyl, cycloalkyl, cycloalkylalkyl, heteroaryl, heteroaralkyl, heterocycloalkyl, and heterocycloalkylalkyl radicals, or in the case of a disubstituted aminoalkyl radical, said substituents along with the nitrogen atom to which they are attached, form a heterocycloalkyl or a heteroaryl radical; and

R^4 represents radicals as defined by R^3 except for hydrogen.

79. Compound of Claim 78 wherein R represents alkyl, alkenyl, cycloalkyl, cycloalkylalkyl, heterocycloalkyl, heterocycloalkylalkyl, aryl, heteroaryl, aralkyl, heteroaralkyl, aminocarbonylalkyl, aminoalkylcarbonylalkyl, alkylcarbonylalkyl, aryloxyalkylcarbonylalkyl and aralkoxycarbonylalkyl radicals.

80. Compound of Claim 78 wherein R^1 represents hydrogen, alkyl and alkenyl and alkynyl radicals.

81. Compound of Claim 78 wherein R^1 represents alkyl radicals having from 1 to about 4 carbon atoms, alkenyl radicals having from 2 to 8 carbon atoms, and alkynyl radicals having from 2 to about 8 carbon atoms.

82. Compound of Claim 78 wherein R^1 represents methyl, ethyl, isopropyl, t-butyl and propargyl radicals.

83. Compound of Claim 78 wherein R¹ represents methyl, ethyl and t-butyl radicals.

84. Compound of Claim 78 wherein R¹ represents
5 methyl and ethyl radicals.

85. Compound of Claim 78 wherein R¹ represents a methyl radical.

10 86. Compound of Claim 78 wherein R represents alkyl, cycloalkyl, cycloalkylalkyl, aryl and aralkyl radicals.

15 87. Compound of Claim 78 wherein R is selected from alkyl and aralkyl radicals.

20 88. Compound of Claim 78 wherein R² represents alkyl, cycloalkylalkyl and aralkyl radicals, which radicals are optionally substituted with halogen radicals and radicals represented by the formula -OR⁹ and -SR⁹ wherein R⁹ represents alkyl radicals.

25 89. Compound of Claim 78 wherein R² represents alkyl, cycloalkylalkyl and aralkyl radicals.

90. Compound of Claim 78 wherein R² represents aralkyl radicals.

30 91. Compound of Claim 78 wherein R² represents CH₃SCH₂CH₂-, iso-butyl, n-butyl, benzyl, 4-fluorobenzyl, 2-naphthylmethyl and cyclohexylmethyl radicals.

35 92. Compound of Claim 78 wherein R² represents an n-butyl and iso-butyl radicals.

93. Compound of Claim 78 wherein R² represents benzyl, 4-fluorobenzyl, and 2-naphthylmethyl radicals.

94. Compound of Claim 78 wherein R² represents a cyclohexylmethyl radical.

5 95. Compound of Claim 78 wherein R³ and R⁴ independently represent alkyl, haloalkyl, alkenyl, hydroxyalkyl, alkoxyalkyl, cycloalkyl, cycloalkylalkyl, heterocycloalkyl, heterocycloalkylalkyl, aryl, aralkyl, heteroaryl and heteroaralkyl radicals.

10 96. Compound of Claim 95 wherein R³ and R⁴ independently represent alkyl, aralkyl, cycloalkyl, cycloalkylalkyl and aryl radicals.

15 97. Compound of Claim 95 wherein R³ and R⁴ independently represent alkyl and aryl radicals.

 98. Compound of Claim 95 wherein R³ and R⁴ independently represent alkyl and alkoxyalkyl radicals.

20 99. Compound of Claim 95 wherein R³ and R⁴ independently represent alkyl, cycloalkyl and cycloalkylalkyl radicals.

25 100. Compound of Claim 95 wherein R³ and R⁴ independently represent alkyl, heterocycloalkyl and heterocycloalkylalkyl radicals.

 101. Compound of Claim 95 wherein R³ and R⁴ independently represent alkyl, aryl and aralkyl radicals.

30 102. Compound of Claim 95 wherein R³ and R⁴ independently represent alkyl, cycloalkyl, cycloalkylalkyl, heterocycloalkyl, heterocycloalkylalkyl, aryl, aralkyl, heteroaryl and heteroaralkyl radicals.

103. Compound of Claim 78 wherein R³ represents alkyl radicals having from about 2 to about 5 carbon atoms.

5 104. Compound of Claim 96 wherein R⁴ represents methyl, ethyl, i-propyl, t-butyl and 1,1-dimethylpropyl radicals.

10 105. Compound of Claim 78 wherein R³ and R⁴ independently represent alkyl radicals having from about 2 to about 5 carbon atoms, cycloalkylalkyl radicals, aralkyl radicals, heterocycloalkylalkyl radicals and heteroaralkyl radicals.

15 106. Compound of Claim 78 wherein R³ represents benzyl, para-fluorobenzyl, para-methoxybenzyl, para-methylbenzyl, and 2-naphthylmethyl radicals and R⁴ represents phenyl.

20 107. Compound of Claim 78 wherein R³ is cyclohexylmethyl or cyclohexyl and R⁴ is phenyl.

 108. Compound of Claim 78 wherein R³ is i-amyl and R⁴ is phenyl.

25 109. Compound of Claim 78 wherein R³ is i-butyl and R⁴ is phenyl.

 110. Compound of Claim 78 wherein R³ is n-butyl and R⁴ is phenyl.

 111. Compound of Claim 78 wherein R³ is neo-pentyl and R⁴ is phenyl.

35 112. Compound of Claim 78 wherein R⁴ represents aryl radicals which are substituted with substituents selected from alkoxy, alkyl, carboalkoxy, carboxy, amino, halo, and nitro substituents.

113. Compound of Claim 78 wherein R⁴ represents aryl radicals which are substituted with substituents selected from amino, acetamido, chloro, fluoro, methoxy and nitro.

114. Compound of Claim 113 wherein the R⁴ aryl substituents are in the para-position.

115. Compound of Claim 78 wherein R³ represents heteroaralkyl radicals and R⁴ is a phenyl radical.

116. Compound of Claim 78 wherein R³ is a p-fluorobenzyl radical and R⁴ is a phenyl radical.

117. A pharmaceutical composition comprising a compound of Claim 78 and a pharmaceutically acceptable carrier.

118. Method of inhibiting a retroviral protease comprising administering a protease inhibiting amount of a composition of Claim 117.

119. Method of Claim 118 wherein the retroviral protease is HIV protease.

120. Method of treating a retroviral infection comprising administering an effective amount of a composition of Claim 117.

121. Method of Claim 120 wherein the retroviral infection is an HIV infection.

122. Method for treating AIDS comprising administering an effective amount of a composition of Claim 117.

123. A compound of Claim 1 which is:

Propanamide, N-[2-hydroxy-3-[(2-methylpropyl)(phenylsulfonyl)amino]-1-(phenylmethyl)propyl]-2-methyl-3-(methylsulfonyl)-, [1S-[1R*(R*),2S*]]-;

Propanamide, N-[2-hydroxy-3-[(3-methylbutyl)(phenylsulfonyl)amino]-1-(phenylmethyl)propyl]-2-methyl-3-(methylsulfonyl)-, [1S-[1R*(R*),2S*]]-;

Propanamide, N-[2-hydroxy-3-[(propyl)(phenylsulfonyl)amino]-1-(phenylmethyl)propyl]-2-methyl-3-(methylsulfonyl)-, [1S-[1R*(R*),2S*]]-;

Propanamide, N-[2-hydroxy-3-[(butyl)(phenylsulfonyl)amino]-1-(phenylmethyl)propyl]-2-methyl-3-(methylsulfonyl)-, [1S-[1R*(R*),2S*]]-;

Propanamide, N-[2-hydroxy-3-[(2-methylpropyl)(4-methoxyphenylsulfonyl)amino]-1-(phenylmethyl)propyl]-2-methyl-3-(methylsulfonyl)-, [1S-[1R*(R*),2S*]]-;

Propanamide, N-[2-hydroxy-3-[(butyl)(4-methoxyphenylsulfonyl)amino]-1-(phenylmethyl)propyl]-2-methyl-3-(methylsulfonyl)-, [1S-[1R*(R*),2S*]]-;

Propanamide, N-[2-hydroxy-3-[(propyl)(4-methoxyphenylsulfonyl)amino]-1-(phenylmethyl)propyl]-2-methyl-3-(methylsulfonyl)-, [1S-[1R*(R*),2S*]]-;

Propanamide, N-[2-hydroxy-3-[(2-methylpropyl)(4-acetamido)phenylsulfonyl)amino]-1-(phenylmethyl)propyl]-2-methyl-3-(methylsulfonyl)-, [1S-[1R*(R*),2S*]]-;

Propanamide, N-[2-hydroxy-3-[(3-methylbutyl)

(4-amino)phenylsulfonyl)amino]-1-(phenylmethyl)propyl]-2-methyl-3-(methylsulfonyl)-, [1S-[1R*(R*),2S*]]-;

5 Propanamide, N-[2-hydroxy-3-[(2-methylpropyl)
(3,4-dimethoxy)phenylsulfonyl)amino]-1-(phenylmethyl)propyl]-2-methyl-3-(methylsulfonyl)-, [1S-[1R*(R*),2S*]]-; or

10 Preparation of Propanamide, N-[2-hydroxy-3-[(3-methylbutyl)(4-methoxyphenylsulfonyl)amino]-1-(phenylmethyl)propyl]-2-methyl-3-(methylsulfonyl)-[1S-[1R*(R*),2S*]]-.